

**Amendments to the Specification**

Please replace paragraph [23] with the following amended paragraph:

[23] The filtered digital signal output from the channel match IFFT 73 ~~FFT 73~~ is coupled to a digital to analog converter 71 which transforms the information into a base-band signal comprising both the in-phase and quadrature phase signals. These analog signals are coupled to a modulator 69 which generates an intermediate frequency (IF) 16-QAM signal that is coupled to mixer 67. Mixer 67 mixes the IF with the radio frequency (RF) carrier oscillator 65 signal and outputs the modulated carrier to the channel 63. In this illustrative embodiment, the channel is a radio frequency channel.